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AMENDED CLAIMS

1. An insulating composition for an electric power cable which comprises a crosslinkable ethylene polymer, characterised in that the ethylene polymer is a multimodal ethylene copolymer obtained by coordination catalysed polymerisation of ethylene and at least one other alpha-olefin in at least one stage, said multimodal ethylene copolymer having a density of 0.890-0.940 g/cm³, a MFR₂ of 0.1-10 g/10 min, a MWD of 3.5-8, a melting temperature of at most 125°C, and a comonomer distribution as measured by TREF, such that the fraction of copolymer eluted at a temperature higher than 90°C does not exceed 5% by weight, and said multimodal ethylene copolymer including an ethylene copolymer fraction selected from (a) a low molecular weight ethylene copolymer having a density of 0.900-0.950 g/cm³ and a MFR₂ of 25-500 g/10 min, and (b) a high molecular weight ethylene copolymer having a density of 0.870-0.940 g/cm³ and a MFR₂ of 0.01-3 g/10 min.

2. An insulating composition as claimed in claim 1, wherein the multimodal ethylene copolymer has a comonomer distribution as measured by TREF such that the fraction of copolymer eluted at a temperature higher than 90°C does not exceed 7% by weight.

3. An insulating composition as claimed in any one of claims 1-2, wherein the multimodal ethylene copolymer has a viscosity of 2500-7500 Pa.s at 135°C and a shear rate of 10 s⁻¹, 1000-2200 Pa.s at 135°C and a shear rate of 100 s⁻¹, and 250-400 Pa.s at 135°C and a shear rate of 1000 s⁻¹.

4. An insulating composition as claimed in claim 3, wherein the multimodal ethylene copolymer has a viscosity of 4000-7000 Pa.s at 135°C and a shear rate of 10 s⁻¹, 1000-2000 Pa.s at 135°C and a shear rate of 100 s⁻¹, and 300-350 Pa.s at 135°C and a shear rate of 1000 s⁻¹.

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5. An insulating composition as claimed in any one of claims 1-4, wherein the comonomer of the copolymer is at least one member selected from the group consisting of propylene, 1-butene, 4-methyl-1-pentene, 1-hexene, and 1-octene.

6. An insulating composition as claimed in any one of claims 1-5, wherein the MWD is 4-5.

7. An insulating composition as claimed in any one of claims 1-6, wherein the multimodal ethylene copolymer is a bimodal ethylene copolymer comprising 30-60 % by weight of a low molecular weight ethylene copolymer fraction and 70-40 % by weight of a high molecular weight ethylene copolymer fraction.

8. An insulating composition as claimed in any one of claims 1-7, wherein the multimodal ethylene copolymer includes a low molecular weight ethylene copolymer fraction having a density of 0.900-0.950 g/cm³ and a MFR₂ of 50-100 g/10 min.

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9. An electric power cable comprising a conductor surrounded by an inner semiconducting layer, an insulating layer, and an outer semiconducting layer, characterised in that the insulating layer comprises a crosslinked ethylene copolymer obtained by coordination catalysed polymerisation of ethylene and at least one other alpha-olefin in at least one stage, said multimodal ethylene copolymer having a density of 0.890-0.940 g/cm³, a MFR₂ of 0.1-10 g/10 min, a MWD of 3.5-8, a melting temperature of at most 125°C, and a comonomer distribution as measured by TREF, such that the fraction of copolymer eluted at a temperature higher than 90°C does not exceed 5% by weight, and said multimodal ethylene copolymer including an ethylene copolymer fraction selected from (a) a low molecular weight ethylene copolymer having a density of 0.900-0.950 g/cm³ and a MFR₂ of 25-500 g/10 min, and (b) a high molecular weight ethylene copolymer having a density of 0.870-0.940 g/cm³ and a MFR₂ of 0.01-3 g/10 min.